

June 27, 2002

To: Sarah R. Thomas, Administrative Law Judge, CPUC  
From: Loren Lutzenhiser  
Re: Rulemaking 01-08-028, Provision of EM&V Services

This submittal is in response to the Rulemaking 01-08-028 Administrative Law Judge's ruling regarding Evaluation, Measurement, and Verification of Local Energy Efficiency Programs issued on June 17, 2002. My firm is interested in providing Energy Measurement and Verification (EM&V) services to operators of these programs.

Please find attached the requested materials:

- Qualifications and areas of expertise
- Resume of firm principal (supervisor of project employees/subcontractors)

There are no potential conflicts of interest for the involvement of Lutzenhiser and Associates in performing these services. We submit the following responses to the specific questions raised in the Ruling:

Identification of the Recipient and local energy efficiency program for which the Contractor proposes to perform EM&V services:

We plan to provide EM&V services for the program conducted by the California Building Performance Contractors Association (CBPCA).

Explanation of why the Contractor is independent of Recipient:

The Contractor has never worked on a project with CBPCA and is not involved in any local energy efficiency implementation and program management services.

A list of all work the Contractor has done with or for the Recipient:

The Contractor has never worked with or for CBPCA.

An explanation of any factor that might lead a reasonable person to question whether the Contractor is actually independent of the Recipient:

There are no such factors.

A description of any reason why the Commission might not select the Contractor:

There are no reasons why the commission might not select Lutzenhiser as a Contractor.

## LUTZENHISER & ASSOCIATES QUALIFICATIONS

LoREN Lutzenhiser has more than twenty years of experience in energy analysis and program evaluation. He is an Associate Professor of Sociology and Rural Sociology at Washington State University, where he has directed a number of major studies of energy issues related to the Pacific Northwest and California. In the fall of 2002, he will join the faculty at Portland State University as an Associate Professor of Urban Studies and Planning, specializing in energy, technological change and sustainable development.

A Ph.D. sociologist (UC-Davis, 1988), Lutzenhiser's energy research and evaluation practice is highly interdisciplinary, and he routinely teams with associates and co-investigators who are economists, engineers, psychologists, anthropologists, architects, and systems modelers. He and associates have been involved in a broad range of program/policy evaluation and basic research projects over the past two decades. They have studied consumer energy use patterns in single family dwellings and apartments, residential consumer conservation actions and motivations, the social organization of transportation energy use and air pollution, energy equity issues and policy impacts on hard-to-reach consumer subgroups/segments, and the dynamics of energy efficiency decision-making in public sector organizations, commercial real estate development markets, the residential construction industry, the operations/maintenance of office and retail facilities, and efficiency choice in the agricultural sector (see project listing below).

Lutzenhiser and associates possess a broad range of methodological expertise in their projects. Methods routinely used range from participant observation, depth interviewing, surveys (telephone, mail and in-person administration), content analysis of documentary materials, historical analysis, and comparative case study analysis, to secondary analysis of utility survey and account/billing data, econometric modeling, and systems simulation. Evaluation approaches include process as well as impact evaluation, with contributions to cutting edge work in *theory-based* evaluation of energy efficiency programs (particularly market-oriented programs in which strategic interventions are designed to leverage private market resources in order to induce/encourage self-sustaining pro-efficiency investments without large public or rate-payer subsidies).

A leading authority on the human dimensions of energy use and energy efficiency interventions, Lutzenhiser's work has had a major influence in these areas. He is widely published in both basic science and applied program/policy areas, and has presented his perspectives and the findings of his research and evaluation work to a wide variety of audiences (see attached resume). He has contributed to policy and research development panels, as well as to regulatory decision-making processes, conducted by groups as varied as the National Research Council, the

California Energy Commission, the Electric Power Research Institute, the Northwest Energy Efficiency Alliance, the Market Transformation Roundtable, the Energy Foundation, the Utility Energy Forum, the Organization for Economic Cooperation and Development (OECD), the International Institute for the Environment (Geneva), the Oxford Global Change Programme, and the Norwegian Research Council. He is an active member of a number of professional associations, including the American Sociological Association (current Chair of the Section on Environment and Technology), the American Council for an Energy Efficient Economy (panel leader for human dimensions panels of energy efficiency), the Rural Sociological Society, the Society for the Study of Social Problems (editorial board of the journal *Social Problems*), the International Sociological Association, and the Society for the Social Study of Science.

## RECENT ASSOCIATIONS

Loren Lutzenhiser has been proposed by the California Building Performance Contractors Association (CBPCA) as the principal designer and implementer of the CBPCA's Comprehensive Whole-House Residential Retrofit Program evaluation. He will supervise the work of subcontractors as needed. Past and present associates on other projects, who are available to contribute to the CBPCA program evaluation, include:

### [Richard Kunkle, PE](#)

(M.S. Engineering) – energy efficiency programs, evaluation design, depth interviewing, qualitative, quantitative, policy and content analysis.

### [James Woods](#)

(Ph.D. candidate Economics) – energy efficiency policy, utility billing data and weather analysis, demand forecasting, econometric modeling.

### [Bruce Hackett](#)

(Ph.D. Sociology) – energy and behavior, residential energy consumption and conservation action across demographic segments, energy programs from end-users' points of view, summer residential cooling practices, adoption/diffusion of alternative cooling technologies.

### [Scott Sawyer](#)

(M.A. Sociology) – qualitative research, documentary analysis, depth interviewing, environment and technology systems, urban sociology, suburban ways of life, New Urbanist planning approaches.

### [Social and Economic Sciences Research Center, Washington State University](#)

A major regional survey research institute, SESRC combines survey design, data collection and analysis services (for mail, telephone and web-based surveys) with focused research on optimizing survey response rates.

## RELEVANT PROJECTS

### California Energy Commission (CEC)

2001-present

Evaluation of behavioral responses to the Summer 2001 California energy crisis. Focus on residential consumers (sample of 1850 cases), as well as firms (office and retail), local governments, and agricultural sector energy users. Multi-wave surveys, as well as depth interviews and documentary analysis used to investigate patterns of conservation and efficiency investment response, analyzing utility billing data (residential sector) along with data collected directly from consumer samples and other sources (e.g., related to price, media, program effects).

### U.S. Dept. of Agriculture, Fund for Rural America (USDA/FRA)

2001-present

Evaluation of Rural Telework Research and Demonstration Project designed to increase economic benefits to target rural communities in the Pacific Northwest through enhanced use of telecommunications and computing technologies. Data collection from rural communities, network analysis, process evaluation with real-time feedback, impact evaluation.

### USDA, Agricultural Research Center (USDA/ARC)

1998-present

Research on the structure and dynamics of green building movements at the local and regional levels. Depth interviews, documentary sources and participant observation used to inventory and map green business activity in the buildings sector, including both commercial/institutional building design/construction and residential building development, construction and regulation. Policy goals include evaluating the likelihood of success of indigenous market-based green buildings movements and the ‘market transforming’ interventions of energy agencies, governments and foundations.

### California Energy Commission, Public Interest Energy Research Program (CEC/PIER)

1998-present

Multi-disciplinary research and development of advanced non-compressor cooling systems for use in California residential new construction. Depth interviews, field studies, and documentary analysis, as well as collaborative design work with architects, engineers and system modelers. Development of new air handling systems, advanced ‘smart’ thermostatic controllers, integration into existing merchant housing designs and construction practices, identifying and overcoming barriers to adoption in both consumer and builder communities.

### Northwest Energy Efficiency Alliance (NEEA)

1999-2000

Investigate market transformation potentials within the new commercial buildings sector in the Pacific Northwest. Identified aspects of the design process, regulatory systems, technological innovations, and industry trends that might be leveraged to move these markets toward greater energy efficiency investment and long-term sustainability.

California Institute for Energy Efficiency (CIEE)

1999-2000

Investigate the market transformation potentials in the new commercial buildings sector in Northern California. Findings similar to those identified in the NEEA studies (above), but with greater attention to the barriers to efficiency improvement in speculative markets.

University of California Energy Institute (UCEI)

1999

Comparative study of residential construction industry dynamics and trends related to green buildings, sustainability, and affordability. Focus on identifying synergies and conflicts among these industry ‘movements.’

University of California Energy Institute (UCEI)

1998

Exploratory analysis of energy consumption and economic choice in market contexts. Policy goals: to move beyond simple ‘technology transfer’ approaches and weak ‘market transformation’ models toward program-useful data-driven understandings of market behavior and efficiency investment choices (by both residential and business consumers) in real-world market contexts.

U.S. Environmental Protection Agency (EPA)

1997-1999

Case studies of natural resource decision making and environmental management innovations at the community level. Attention to the nature of both ‘consensus’ and ‘bureaucratic’ styles.

California Institute for Energy Efficiency (CIEE)

1998-1999

Scoping study of market transformation research needs in the areas of residential construction, new commercial buildings, and advanced residential metering (e.g., time-of-use) and billing (e.g., high-feedback). Literature reviews, documentary analysis, key informant interviews, combined with expert consultation.

California Institute for Energy Efficiency (CIEE)

1992-1994

Identifying and addressing barriers to the adoption of alternative residential cooling technologies in California transition climates. Field studies, depth interviews and documentary analysis of residential construction industry and its local, regional and national market dynamics. Focus on both supply and demand-side trends that create opportunities for efficiency improvement.

University of California, Energy Research Group (UC/ERG)

1991

Investigating behavioral aspects of residential space cooling using field observation and depth interview approaches. Understanding the range of real-world variation and its sources.

California Energy Commission (CEC)

1987-1988

Exploratory analysis of appliance constellations in Residential Appliance Saturation Survey (RASS) data for San Diego County using cluster analysis, logit modeling and related approaches.

California Energy Commission (CEC)

1986-1987

Residential energy consumption data base analysis. Investigated social patterns of housing, technology, energy use and weather response in San Diego RASS data, using conditional demand estimation and other regression approaches.

Pacific Gas and Electric Company (PG&E)

1985-1986

Behavioral evaluation of master to unit-metering conversions in multi-cultural apartment complexes in Davis, California. Understanding of wide range of variation in consumption prior to the conversion, and the rise of community conservation norms after, even when residents paid very little for their energy.

# LOREN LUTZENHISER

## Contact Information:

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Depts. of Sociology and Rural Sociology  
Washington State University  
Pullman, WA 99164-4020  
(509) 335-6707 fax: (509) 335-2125  
llutz@wsu.edu

## Education:

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Ph.D.	Sociology, University of California, Davis	1988
M.A.	Sociology, University of Montana	1976
B.A.	Sociology, University of Montana	1971

## Research and Teaching:

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Associate Professor of Sociology & Rural Sociology  
Graduate Faculty, Environmental Science & Regional Planning  
Washington State University (1988-present)

Courses taught: Social Research Methods, Evaluation Research, Complex Organizations,  
Poverty and Social Welfare, Technology and Society, Community Studies,  
Energy Systems, Technological Systems and Social Change

## Areas of Specialization:

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Energy, Environment & Technology, Community Dynamics,  
Architecture & Material Culture, Consumption, Market Systems

## Journal Articles and Book Chapters:

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Loren Lutzenhiser

2002 "Marketing Household Energy Conservation: The Message and the Reality" pp.49-65 in Paul C. Stern and Thomas Dietz, eds. *New Tools for Environmental Protection: Education, Information, and Voluntary Measures*. Washington, DC: National Academy Press.

Loren Lutzenhiser

2002 "Environmental Sociology: The Very Idea" *Organization and Environment* 15:5-9.

Loren Lutzenhiser

2002 "Greening the Economy From the Bottom-Up? Lessons in Consumption From the Energy Case" pp. 345-356 in Nicole W. Biggart, ed. *Readings in Economic Sociology* Oxford: Blackwell.

- Loren Lutzenhiser, Craig Harris and Marvin Olsen  
 2001 "Energy, Society and Environment" pp. 222-271 in Riley Dunlap and William Michaelson, eds. *Handbook of Environmental Sociology* Westport, CT: Greenwood Press.
- Loren Lutzenhiser  
 2001 "The Contours of U.S. Climate Non-Policy" *Society and Natural Resources* 14:511-523.
- Harold Wilhite, Elizabeth Shove, Loren Lutzenhiser and Willett Kempton  
 2001 "The Legacy of Twenty Years of Energy Demand Management: We Know More About Individual Behavior But Next to Nothing About Demand" pp. 109-126 in Ebarhard Jochem, Jayant Sathaye and Daniel Bouille, eds. *Society, Behaviour and Climate Change Mitigation*. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Carl Blumstein, Seymour Goldstone and Loren Lutzenhiser.  
 2000 "A Theory-Based Approach to Market Transformation" *Energy Policy* 28:137-144.
- Loren Lutzenhiser and Elizabeth Shove  
 1999 "Coordinated Contractors and Contracting Knowledge: The Organizational Limits to Interdisciplinary Energy Efficiency Research and Development in the U.S. and U.K." *Energy Policy* 27:217-227.
- Harold Wilhite and Loren Lutzenhiser  
 1999 "Social Loading and Sustainable Consumption" *Advances in Consumer Research* 26:281-287.
- Elizabeth Shove, Loren Lutzenhiser, Simon Guy, Bruce Hackett, and Harold Wilhite  
 1998 "Energy and Social Systems" pp. 201-234 in Steve Rayner and Elizabeth Malon, eds. *Human Choice and Climate Change* Columbus, OH: Battelle Press.
- Bruce Hackett and Loren Lutzenhiser  
 1998 "The Unity of Self and Object" pp. 83-93 in Per Otnes, et al., eds. *Yearbook of Sociology* Oslo: Institutt for Sosiologi. (reprinted from *Western Folklore* 4:317-324).
- Loren Lutzenhiser  
 1997 "Social Structure, Culture and Technology: Modeling the Driving Forces of Household Consumption" pp. 77-91 in Paul C. Stern, Thomas Dietz, Vernon W. Ruttan, Robert H. Socolow, and James Sweeney, eds. *Environmentally Significant Consumption: Research Directions* Washington, DC: National Academy Press.
- Lorie Higgins and Loren Lutzenhiser  
 1995 "Ceremonial Equity: Low Income Energy Assistance and the Failure of Socio-Environmental Policy" *Social Problems* 42:468-492.
- Loren Lutzenhiser  
 1994 "Innovation and Organizational Networks: Barriers to Energy Efficiency in the U.S. Housing Industry" *Energy Policy* 22:657-665.
- Loren Lutzenhiser  
 1994 "Sociology, Energy and Interdisciplinary Environmental Science" *The American Sociologist* 25:57-78.

Riley Dunlap, Loren Lutzenhiser and Eugene Rosa  
1994 "Understanding Environmental Problems: A Sociological Perspective" pp. 27-49 in B. Burgenmeier (ed.) *Economy, Environment and Technology: A Socio-Economic Approach*. Armonk, NY: M.E. Sharpe.

Loren Lutzenhiser  
1993 "Social and Behavioral Aspects of Energy Use"  
*Annual Review of Energy and the Environment* 18:247-89.

Loren Lutzenhiser and Bruce Hackett  
1993 "Social Stratification and Environmental Degradation: Understanding Household CO2 Production" *Social Problems* 40:50-73.

Loren Lutzenhiser  
1992 "A Question of Control: Alternative Patterns of Air Conditioner Use"  
*Energy and Buildings* 18:193-200.

Haruyuki Fujii and Loren Lutzenhiser  
1992 "Japanese Residential Air Conditioning Technology: Natural Cooling and Intelligent Systems" *Energy and Buildings* 18:221-234.

Loren Lutzenhiser  
1992 "A Cultural Model of Household Energy Consumption"  
*Energy-The International Journal* 17:47-60.

Bruce Hackett and Loren Lutzenhiser  
1991 "Social Structures and Economic Conduct: Interpreting Variations in Household Energy Consumption" *Sociological Forum* 6:449-470.

#### Edited Volumes:

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Loren Lutzenhiser (ed.)  
2002 *Symposium on 25 Years of Environmental Sociology*. Special Issue of *Organization and Environment*.

Willett Kempton and Loren Lutzenhiser (eds.)  
1992 *Air Conditioning—The Interplay of Technology, Culture and Comfort*. Special Issue of *Energy and Buildings* vol. 8, nos. 3-4.

#### Papers in Refereed Conference Proceedings:

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Loren Lutzenhiser, Marcia Gossard and Sylvia Bender  
2002 "Crisis in Paradise: Understanding the Household Conservation Response to California's 2001 Energy Crisis" *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press (in press).

Robert McBride, Kathleen Bagby, Loren Lutzenhiser and Ricardo Amon  
2002 "Consumer Conservation, Demand-Reduction and Fuel-Switching Behaviors among Agriculturists in California, Summer 2001" *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press (in press).

Kathryn Janda, Christopher Payne, Richard Kunkle and Loren Lutzenhiser

- 2002 “What Organizations Did (and Didn’t) Do: Three Factors that Shaped Conservation Responses to California’s 2001 ‘Crisis’” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press (in press).
- Sylvia Bender, Mithra Moezzi, Marcia Gossard and Loren Lutzenhiser  
2002 “Using Mass Media to Influence Energy Consumption Behavior: California’s 2001 *Flex Your Power* Campaign as a Case Study” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press (in press).
- Richard Kunkle and Loren Lutzenhiser  
2001 “An Improved Model for New Commercial Office Building Markets: Implications for Market Research and Evaluation” *Proceedings, International Energy Evaluation Conference*.
- Carl Blumstein, Loren Lutzenhiser and Seymour Goldstone  
2001 “From Technology Transfer to ‘Market Transformation’” *Proceedings, European Council for an Energy Efficient Economy* . Paris: ECEEE Press.
- Loren Lutzenhiser and Maria Gossard  
2000 “Lifestyle, Status and Energy Consumption” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press 8:207–222.
- Tom Beamish, Richard Kunkle, Loren Lutzenhiser and Nicole Biggart  
2000 “Why Innovation Happens: Structured Actors and Emergent Outcomes in the Commercial Buildings Sector” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press 8:13–26.
- Richard Kunkle, Loren Lutzenhiser and Linda Dethman  
2000 “Influencing the Purchase of Energy Efficient Products: It’s Not as Easy as It Looks” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press 8:185–196.
- Harold Wilhite, Elizabeth Shove, Loren Lutzenhiser and Willett Kempton  
2000 “Twenty Years of Energy Demand Management: We Know More About Individual Behavior But How Much Do We Really Know About Demand?” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press 8:435–453.
- Richard Kunkle and Loren Lutzenhiser  
1999 “Beyond Market Transformation: Some Perspectives on Energy Evaluation and Research and the Energy Efficiency Movement” *Proceedings, International Energy Evaluation Conference*. (CD ROM)
- Carl Blumstein, Seymour Goldstone and Loren Lutzenhiser.  
1998 “A Theory-based Approach to Market Transformation.” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press 7:21-32.
- Richard Kunkle and Loren Lutzenhiser.  
1998 “The Evolution of Market Transformation in the Energy Efficiency Industry.” *Proceedings, American Council for an Energy Efficient Economy*. Washington, DC: ACEEE Press 7:171-183.
- Harold Wilhite and Loren Lutzenhiser  
1997 “Social Loading and Sustainable Consumption” *Proceedings, European Council for an Energy Efficient Economy* . Paris: ECEEE Press.

Loren Lutzenhiser and Elizabeth Shove

- 1996 "Coordinated Contractors and Contracting Knowledge: The Organizational Structure of Energy Efficiency Research in the US and UK" *Proceedings, American Council for an Energy Efficient Economy*. 8:113-122.

Karl Brown, Carl Blumstein, Loren Lutzenhiser, Bruce Hackett and Y. Joe Huang

- 1996 "Does Air-Conditioning Engineering Rubric Work in Residences?" *Proceedings, American Council for an Energy Efficient Economy*. 8:11-20.

Loren Lutzenhiser

- 1994 "Why Isn't New Housing More Energy-Efficient? The Role of Organizational Networks in Technology Transfer" *Proceedings, American Council for an Energy Efficient Economy*. 1:109-118.

Bruce Hackett and Loren Lutzenhiser

- 1993 "Alternatives to Compressor Cooling in California Transition Climates: Cultural, Sociological, and Institutional Issues" *Proceedings, California Institute for Energy Efficiency, Annual Conference*. 53-54.

Loren Lutzenhiser

- 1993 "Social and Behavioral Characteristics of Energy Use" *Proceedings, 20th Annual Illinois Energy Conference* 20:151-165.

Loren Lutzenhiser

- 1990 "Explaining Consumption: The Promises and Limitations of Energy and Behavior Research" *Proceedings, American Council for an Energy Efficient Economy*. 2:101-2:110.

Loren Lutzenhiser and Bruce Hackett

- 1990 "Social Stratification and Appliance Saturation" *Proceedings, American Council for an Energy Efficient Economy*. 2:61-68.

Loren Lutzenhiser and Bruce Hackett

- 1988 "Social and Engineering Models of Household Energy Consumption" *Proceedings, American Council for an Energy Efficient Economy*. 11:71-85.

Bruce Hackett and Loren Lutzenhiser

- 1986 "Energy Billing, Cultural Variation and Residential Energy Consumption" *Proceedings, American Council for an Energy Efficient Economy*. 7:91-104.

Loren Lutzenhiser and Bruce Hackett

- 1986 "Issues in the Study of Residential Energy Use: Ethnographic Methods & Models of Behavior" *Proceedings, American Council for an Energy Efficient Economy*. 7:105-118.

#### Research Monographs and Technical Reports:

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Loren Lutzenhiser

- 2002 *An Exploratory Analysis of Residential Electricity Conservation Survey and Billing Data: Southern California Edison, Summer 2001* Sacramento, CA: California Energy Commission, Consultant Report 400-02-006F

- Loren Lutzenhiser, Nicole Biggart, Richard Kunkle and Tom Beamish  
2001 *Market Structure and Energy Efficiency—The Case of New Commercial Buildings* Washington State University, Pullman, WA / University of California, Davis, CA. Report to the California Institute for Energy Efficiency, Berkeley, CA.
- Richard Kunkle and Loren Lutzenhiser  
2001 *New Commercial Office Building Markets: Developing Strategic Interventions* Washington State University, Olympia and Pullman, WA. Report to the Northwest Energy Efficiency Alliance, Portland, OR.
- Loren Lutzenhiser and Kathryn Janda  
1999 *Residential New Construction: Market Transformation Research Needs* Washington State University, Pullman, WA. Report to the California Institute for Energy Efficiency, Berkeley, CA.
- Loren Lutzenhiser  
1999 “Evaluating ‘Market Transformation’ as a U.S. Environmental Policy Strategy” Report prepared for York, Dan (ed.) 1999 *A Discussion and Critique of Market Transformation* Energy Center of Wisconsin, Madison, WI.
- Loren Lutzenhiser, Richard Kunkle, Nicole Woolsey Biggart and Bruce Hackett  
1998 *Commercial Buildings: Market Transformation Research Needs* Washington State University, Pullman, WA. Report to the California Institute for Energy Efficiency, Berkeley, CA.
- Loren Lutzenhiser and Bruce Hackett  
1996 *Social Science Perspectives on the Design of Control Systems for Compressorless Housing: Taking User Understandings into Account.* Report to the California Institute for Energy Efficiency, Berkeley, CA.
- Loren Lutzenhiser, Bruce Hackett, David Hall and David Hungerford  
1994 *Alternative Cooling Technologies for California: Social Barriers, Opportunities & Design Issues.* Berkeley, CA: University of California Energy Research Group (UER-289).
- Loren Lutzenhiser and Bruce Hackett  
1993 *Preliminary Assessment of Barriers to Residential Cooling Alternatives: Year #1 Final Report.* Berkeley, CA: California Institute for Energy Efficiency.
- Loren Lutzenhiser and Bruce Hackett  
1990 *Social Variation in Household Technology: Disaggregating Estimates of Appliance Saturation.* Berkeley, CA: University of California Energy Research Group (UER-248).
- Loren Lutzenhiser, Bruce Hackett and Howard Schutz  
1988 *Social Variation and Electricity Consumption in San Diego, California: Exploratory Data Analysis and the California Energy Commission's Electricity Demand Forecasting Model.* Berkeley, CA: University of California Energy Research Group (UER-196).
- Loren Lutzenhiser, Bruce Hackett and Howard Schutz  
1987 “Social Variation and Electricity Consumption in San Diego, California: Exploring Consumption and the CEC Demand Forecasting Model” *Program in Analysis of California Energy Consumption Data: First Year Project Results.* Berkeley, CA: University of California Energy Research Group (UER-189: 59-74).

Loren Lutzenhiser and Bruce Hackett

- 1987 *Social Patterns in Household Energy Consumption: An Analysis of the Response to a Conversion from Master to Individual Metering of Electricity and Natural Gas in Two Davis, California Apartment Complexes*. Research Report to the Pacific Gas and Electric Company, San Francisco, CA. Davis, CA: University of California.

Presentations at Professional Meetings and Invited Presentations:

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- 2002 “Summer 2001 Energy Crisis: Understanding State-wide Consumer Response” – California Energy Commission, Sacramento, CA.
- “Consumer Views of Efficiency Incentives: Evidence from Summer 2001” – Utility Energy Forum, Tahoe City, CA.
- “New Commercial Office Building Markets: A Context for Building Commissioning” – National Building Commissioning Conference, Chicago, IL.
- 2001 “Human Activities Driving the Carbon Cycle: Behavioral Issues” – National Research Council, Washington, DC.
- “25 Years of Environmental Sociology: An Anniversary Symposium” – American Sociological Association, Anaheim, CA.
- “An Improved Model for New Commercial Office Building Markets: Implications for Market Research and Evaluation” – International Energy Program Evaluation Conference, Salt Lake City, UT.
- “Implications of Summer 2001 Behavioral Research for California Electricity Demand Forecasting” – California Energy Commission, Sacramento, CA.
- “Behavioral Responses to California’s Summer 2001 Energy Crisis: Preliminary Findings” – American Council for an Energy Efficient Economy, Berkeley, CA.
- 2000 “Lifestyle, Status and Energy Consumption” – American Council for an Energy Efficient Economy, Asilomar, CA.
- “Marketing Household Energy Conservation: The Message and the Reality” – National Research Council, Washington, DC.
- “Understanding Commercial Buildings Markets” – U.S. Market Transformation Roundtable, Portland, OR.
- “Social Science Perspectives on Energy Education” – Northwest Energy Education Institute, Portland, OR.
- 1999 “Drifting Toward a U.S. Climate Policy: Models, Markets and Movements” – American Sociological Association, Chicago, IL.
- “Energy Related Decision-Making” – Third Annual Market Transformation Conference, American Council for an Energy Efficient Economy, Washington, DC.
- “Market Transformation Scoping Research: Findings and Directions” – CIEE Triennial Review Panel, University of California, Office of the President, Berkeley, CA.

“Social and Behavioral Dimensions of Energy Use and Energy Education Programming” – Northwest Energy Education Institute, Board of Advisors, Portland, OR.

1998 “Toward a Theory of Tools” – International Sociological Association, Montreal, Canada.

Discussant, session on “The Economic Sociology of the Environment” – American Sociological Association, San Francisco, CA.

“Greening of the U.S. Residential Construction Industry?” – American Sociological Association, San Francisco, CA.

“A Theory-based Approach to Market Transformation” – American Council for an Energy Efficient Economy, Asilomar, CA.

“The Evolution of Market Transformation in the Energy Efficiency Industry” – American Council for an Energy Efficient Economy, Asilomar, CA.

1997 Organizer and chair, session on “Technology and Society” – American Sociological Association, Toronto, Canada.

“Social Loading and Sustainable Consumption” – European Council for an Energy Efficient Economy, Prague, Czech Republic.

1996 “The Organizational Dynamics of Energy Efficiency Research and Development in the UK and the US: Contracting Knowledge and Configuring Laboratories” – Society for the Social Study of Science, Bielefeld, Germany.

Discussant, session on “Theory and Environmental Sociology” – American Sociological Association, New York, NY.

“Riding in Style: Social Class, Transport and Environmental Impact” – American Sociological Association, New York, NY.

Organizer/Panel Leader and Presider: “Human Dimensions of Energy Use” (9 sessions) American Council for an Energy Efficient Economy, Asilomar, CA.

“Coordinated Contractors and Contracting Knowledge: The Organizational Structure of Energy Efficiency Research in the US and UK” (with Elizabeth Shove) – Pacific Sociological Association, Seattle, WA. – Revised version also presented at meetings of the American Council for an Energy Efficient Economy, Asilomar, CA.

“Sociocultural Processes and Consumption Modeling” – Workshop on Modeling Energy Behavior, Environmental Change Unit, University of Oxford, Oxford, UK.

“Theorizing the Links Between Social Structure and Environmental Change” – Center for the Study of Environmental Change, Lancaster University, Lancaster, UK.

“A Sociocultural Approach to Consumption in the Industrial Societies” – Workshop on Efficient Energy Use and Sustainable Consumption in Households: Research Challenges and Creative Policy Incentives, Norwegian Research Council, Oslo, Norway.

“‘Individual Travel Behavior:’ The Very Idea” (with Elizabeth Shove) – Workshop on Individual Travel Behavior: Choice, Culture and Technology, Organization for Economic Cooperation and Development (OECD) and UK Economic and Social Research Council, Global Environmental Change Programme, Sussex University, Brighton, UK.

- 1995 Presider and Discussant, sessions on “Sustainable Communities” and “Technology” – American Sociological Association, Washington, DC.
- Organizer and Presider, session on “Social Construction of Natural Environments in the 21st Century” – Pacific Sociological Association, San Francisco, CA.
- “Social Structure, Culture and Technology: Modelling the Driving Forces of Household Consumption” – Workshop on Global Environmental Impacts of U.S. Consumption National Academy of Sciences, Washington, DC.
- “On Lifestyles and Energy Consumption Analysis” and “The Agents of Change” – Workshop on Introduction of Cultural and Institutional Factors into Energy Modeling, International Academy of the Environment, Geneva, Switzerland.
- “The Use of Complex Case Studies in Environmental Education” – WSU College of Education, Environmental Literacy Faculty Workshop.
- 1994 “Ceremonial Equity, Energy and the Poor: LIHEAP as a Case Study of Socio-Environmental Policy Failure” (with L. Higgins – American Sociological Association, Los Angeles, CA.
- Organizer and Presider, author meets critics session, (Allan Schnaiberg and Ken Gould’s Environment and Society: The Enduring Conflict) – American Sociological Association, Los Angeles, CA.
- Organizer and Presider, session on “Nature, Meaning and Tools” – Rural Sociological Society, Portland, OR.
- “What’s Instrumental Realism and Why is it Important to Environmental Sociology?” – Rural Sociological Society, Portland, OR.
- “Energy Efficiency: Social, Cultural and Political Considerations” – Research Conference on Energy-Efficiency: How Far? How Fast?, Electric Power Research Institute, Palo Alto, California.
- “Why Isn’t New Housing More Energy-Efficient? The Role of Organizational Networks in Technology Transfer” – American Council for an Energy Efficient Economy, Asilomar, CA.
- 1993 “Cultural, Sociological and Institutional Issues in the Design and Use of Cooling Technology” – California Institute for Energy Efficiency, San Diego, CA.
- 1992 “Modeling Energy Consumption: Social Contexts and Social Myths” – American Sociological Association, Pittsburgh, PA
- Discussant, session on: “Environmental Policy and the State: Conflicts and Accommodations” American Sociological Association, Pittsburgh, PA.
- “Social and Behavioral Characteristics of Energy Use” – University of Illinois-Chicago, 20th Annual Illinois Energy Conference, Chicago.
- “Energy and Salmon Restoration: Socioeconomic Considerations” – Oregon Trout/Direct Service Industries, Hood River, Oregon.

- “The Social Structuring of Household Consumption: Implications for Energy Demand Forecasting” – Bonneville Power Administration, Portland, Oregon.
- 1991 “Sociological Perspectives on Environmental Problems” (with R. Dunlap and E. Rosa) – Society for the Advancement of Socioeconomics, International Conference on Socioeconomics and Environmental Pollution, Geneva, Switzerland.
- “Class, Consumption and Climate Change” – American Sociological Association, Cincinnati.
- “The Social Study of Technology and Engineering Education” – WSU College of Engineering and Architecture Advisory Board.
- “Problems in Teaching the Sociology of Technology to Undergraduates” – WSU/NSF Engineering Curriculum Development Project, National Advisory Committee.
- “The Society-Technology Interface” – WSU College of Engineering and Architecture & College of Sciences and Arts, Faculty Seminar.
- 1990 “Explaining Consumption: The Promises and Limitations of Energy and Behavior Research”  
– American Council for an Energy Efficient Economy, Asilomar, CA.
- “Social Stratification and Appliance Saturation” (with B. Hackett) – American Council for an Energy Efficient Economy, Asilomar, CA.
- “Teaching Socio-Technical Systems” – WSU/NSF Engineering Curriculum Development Project, National Advisory Committee.
- “Appropriate Energy Technology and Anti-Poverty Programs” – Whitman County Community Action Center, Pullman, WA.
- 1989 “Disaggregating Appliance Saturations Along Social Class and Lifecycle Lines” – California Energy Commission, Demand Forecasting Office, Sacramento, CA.
- 1988 “Social and Economic Interpretations of Resource Consumption: An Empirical Assessment” (with B. Hackett) – American Sociological Association, Atlanta, GA.
- “Social and Engineering Models of Household Energy Consumption” (with B. Hackett) – American Council for an Energy Efficient Economy, Asilomar, CA.
- “Social Models of Household Energy Consumption” – California Energy Commission, Demand Forecasting Office, Sacramento, CA.
- 1986 “Energy Billing, Cultural Variation and Residential Energy Consumption” (with B. Hackett) – American Council for an Energy Efficient Economy, Santa Cruz, CA.
- “Issues in the Study of Residential Energy Use: Ethnographic Methods and Models of Behavior” (w/ B. Hackett) – Amer. Coun. for an Energy Efficient Economy, Santa Cruz, CA.